Capacity Service

Intraday Capacity Platform for the Interconnection E.ON Netz / Energinet.dk

Trader User's Guide

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Author	DBS

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Abbreviations

BG	Balancing Group / Trader
BG Allocation	Balancing Group Allocation file
DBS	Deutsche Börse Systems AG
CAS	Control Area Schedules
CSV	Character/Comma separated Values (file structure)
EIC	ETSO-Identifications-Code-System
ENDK	Energinet.dk (TSO)
E.ON	E.ON Netz GmbH (TSO)
ESS	ETSO Scheduling System
ETSO	European Transmission System Operators
MW	Megawatts
NTC	Net Transfer Capacity
RCA	Reserved Capacity Allocation
TSO	Transmission System Operator
XML	Extensible Markup Language

Definitions

Contract	The contract is defined by the delivery period which is the start and end time of the contract allocation period.
Contract Delivery Period	The delivery period is the start and end time during which power is to be physically transmitted.
Contract Allocation Period	The contract allocation period is the period between contract start and end time in which capacity can be requested.

Contract Status	A contract can have the following states
	▪ Delivery = a contract is in delivery
	▪ Inactive = before and after contract allocation period
	▪ Active = a contract is in the allocation period - differentiated between
	  ▪ Allocation: requests can be entered
	  ▪ HALT: requests cannot be entered

Capacity Request	A capacity request is the act of asking for permission to physically transfer a specific amount of power (in MW) over the interconnection for a specific hour of the day.
Product	A Product describes the cross border allocation of capacity between two countries. It includes allocation in both directions.

1 Introduction

1.1 Capacity Service

The purpose of the Capacity Service is to enable the timely allocation of cross-border grid capacity. The aim of the Service is to simplify and standardize the overall processes and procedures for the allocation of cross-border grid capacity.

The Service is a web-based solution which does not require specific software installation on the end-user side. The participants can access the service 24 hours a day 7 days a week using a standard internet browser (see chapter 3) for continuous, anonymous allocation of cross-border network capacity. Using the Capacity Service the participants can reserve interconnection capacity on the registered borders via the registered TSOs. Straight through processing is guaranteed with:

- Electronic interfaces for the automatic transfer of capacity schedules from the TSOs.
- The automatic generation for download of the BG Allocation Files for the traders and the automatic transfer of the RCA files for the TSOs based on the ETSO standard.

The Service provides the

- TSOs in the role of auction office with a Service for the allocation of intraday cross-border grid capacity, thus helping to fulfil the EU directive on interconnection capacity.
- Traders (Balancing Groups) with a facility for making short term adjustments to their physical requirements by requesting capacity.

1.2 German - Danish Border

The commercial capacity made available to the market is called Available Transfer Capacity (ATC). The capacity can be differentiated between:

- Available capacity
- Allocated capacity

The aggregated interconnection capacity on the German - Danish border includes the values between the German TSO E.ON Netz GmbH and the Danish TSO Energinet.dk.

1.3 Traders

The traders of the Capacity Service on the German - Danish border are authorized balancing groups within the control area of the TSO E.ON. The Service supports multiple borders (products) and the corresponding assignment on balancing group level. This means that a customer needs to be registered for each border with the concerned TSO(s) for which he wants to request capacity.

2 Functional Overview

Available capacity will be published and requested via the Capacity Service.

The Administrator (E.ON) will provide capacity information to the Capacity Service by uploading the following information:

- NTC (net transfer capacity Germany (E.ON) –> Denmark (ENDK) and Denmark (ENDK) -> Germany (E.ON)
- E.ON CAS (capacity already allocated to each balancing group by TSO E.ON)

After the administrator (E.ON) has confirmed (published) the release of the uploaded data the Capacity Service calculates the available capacity and displays the values in the traders and administrators GUI.

Traders can see the available capacity and the capacity which has already been allocated through yearly, monthly, and daily auctions as well as through the Capacity Service by logging onto the Service. Starting at 18:00 the day before, they can request additional capacity for 60 minute periods (=contracts) corresponding to the hours of the day in megawatts (MW) either via manual input on the GUI or via file upload. The Capacity Service allocates requested capacity to the traders according to the "First come - first serve" principal.

Capacity for a specific contract can be requested by a trader during the allocation phase, which usually starts at 18:00 the day before until 120 minutes before contract delivery.

The Capacity Service informs the TSOs about the current allocation for each balancing group by sending an RCA file via e-mail. After each allocation, an RCA file is sent to the respective TSO, i.e. after an allocation for a Balancing Group an RCA is sent to E.ON and ENDK. The RCA file contains all capacity allocations for each balancing group for that day through yearly, monthly, daily auctions and as well as allocation done through the Capacity Service. The RCA file provides the netted data.

The Service can be set to HALT by the administrator. If the status is on HALT, no capacities can be allocated until the administrator sets the status back to ALLOCATION.

2.1 Principles of Capacity Allocation

- The available interconnection capacity is displayed in megawatts with one decimal digit for the specific contract.
- The available interconnection capacity can be requested by an authorized trader.
- The interconnection capacity is allocated according to the "first come – first serve" principle. Only the time of request is used to determine the allocation of available capacity.
    - Each allocation request receives a timestamp upon receipt by the application server. No two requests can receive the same timestamp.
    - There is no allocation based on price.
- Allocated interconnection capacities will be netted and made available for the opposite direction.

2.2 Set-up Parameters for the Danish Border

Parameter	Content	Comment
Automatic Publish	17:30	Capacity data is published and displayed
Start of Allocation Period	Planned 18:00 on the day before	In special cases modifiable by the administrator
End of Allocation Period	120 minutes before delivery	In special cases modifiable by the administrator
Smallest unit of Capacity	0,1 MW	
Request Quantity	Maximum request: 999,9 MW	1 decimal place allowed

3 Preconditions for Accessing the Intraday Capacity Platform

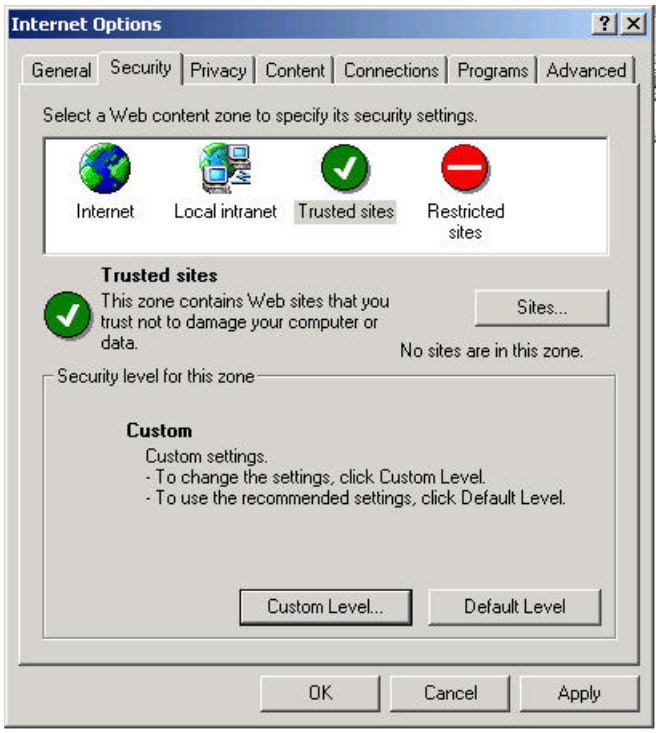
The Intraday Capacity Service is browser-based and only requires an internet connection with an established internet browser. No application software needs to be installed locally on the user's PC. This reduces the system maintenance effort to a minimum for users without impacting the overall system performance.

The exchange's target internet address is: https://www.intraday-capacity.com.

- Supported browsers are Mozilla Firefox and Internet Explorer 6.0
- The speed of the internet connection should be at least 128 kb/sec.

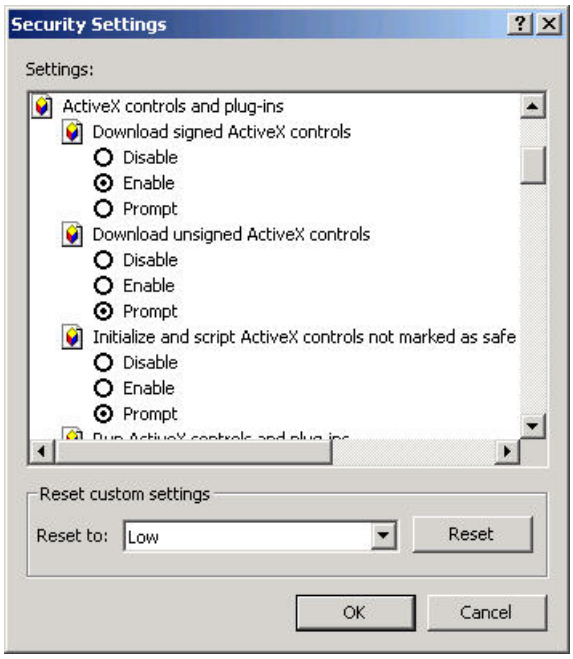
When starting an internet connection to the Capacity Service:

- The browser opens an encrypted SSL connection to the exchange.
- When using Internet Explorer 6.0, the ActiveX component should be activated. In order to do this:
    - open the Internet Options window,
    - select the "Security" tab and
    - enter the exchange's internet address as a trusted site.



- Then, modify the Custom Settings by clicking the "Custom Level" button.

- Finally, in the "Security Settings" window the market participant needs to enable the following settings:
    - Download signed ActiveX controls
    - Download unsigned ActiveX controls
    - Run ActiveX controls and plug-ins
    - Script ActiveX controls marked safe for scripting
    - File download
    - Active Scripting


Security Settings
Settings:
ActiveX controls and plug-ins
Download signed ActiveX controls
Disable
Enable
Prompt
Download unsigned ActiveX controls
Disable
Enable
Prompt
Initialize and script ActiveX controls not marked as safe
Disable
Enable
Prompt
Reset custom settings
Reset to:
Low
Reset
OK
Cancel

4 Login Portal

The Service can be accessed via

https://www.intraday-capacity.com/

which links to the Portal Entry Page.

French border

Time slot 21-May-08	DE -> FR in MW	FR -> DE in MW
00:00-01:00	4441.000	N/A
01:00-02:00	4441.000	N/A
02:00-03:00	4441.000	N/A
03:00-04:00	4441.000	N/A
04:00-05:00	4431.000	N/A
05:00-06:00	4431.000	N/A
06:00-07:00	4341.000	N/A
07:00-08:00	4107.000	N/A
08:00-09:00	4117.000	N/A
09:00-10:00	4117.000	N/A
10:00-11:00	4117.000	N/A
11:00-12:00	4117.000	N/A
12:00-13:00	4565.000	N/A
13:00-14:00	4575.000	N/A
14:00-15:00	4580.000	N/A
15:00-16:00	4615.000	N/A
16:00-17:00	4615.000	N/A
17:00-18:00	4616.000	N/A
18:00-19:00	4630.000	N/A
19:00-20:00	4630.000	N/A
20:00-21:00	4630.000	N/A
21:00-22:00	4610.000	N/A
22:00-23:00	4610.000	N/A
23:00-00:00	4630.000	N/A

Last update: 21-May-08 17:10:02

Swiss border

Time slot 21-May-08	DE -> CH in MW	CH -> DE in MW
00:00-01:00	0.000	0.000
01:00-02:00	0.000	0.000
02:00-03:00	0.000	0.000
03:00-04:00	0.000	0.000
20:00-05:00	0.000	0.000
05:00-06:00	0.000	0.000
06:00-07:00	0.000	0.000
07:00-08:00	0.000	0.000
08:00-09:00	0.000	0.000
09:00-10:00	0.000	0.000
10:00-11:00	0.000	0.000
11:00-12:00	0.000	0.000
12:00-13:00	0.000	0.000
13:00-14:00	0.000	0.000
14:00-15:00	0.000	0.000
15:00-16:00	0.000	0.000
16:00-17:00	0.000	0.000
17:00-18:00	0.000	0.000
18:00-19:00	0.000	0.000
19:00-20:00	0.000	0.000
20:00-21:00	0.000	0.000
21:00-22:00	0.000	0.000
22:00-23:00	0.000	0.000
23:00-00:00	0.000	0.000

Last update: 21-May-08 17:10:01

Danish border

Time slot 21-May-08	DE -> DK in MW	DK -> DE in MW
00:00-01:00	800.000	200.000
01:00-02:00	796.000	204.000
02:00-03:00	734.000	282.000
03:00-04:00	737.000	287.000
04:00-05:00	766.000	266.000
05:00-06:00	820.000	220.000
06:00-07:00	924.000	124.000
07:00-08:00	878.000	178.000
08:00-09:00	932.000	132.000
09:00-10:00	936.000	136.000
10:00-11:00	940.000	140.000
11:00-12:00	844.000	244.000
12:00-13:00	848.000	248.000
13:00-14:00	852.000	252.000
14:00-15:00	856.000	256.000
15:00-16:00	802.000	260.000
16:00-17:00	864.000	264.000
17:00-18:00	0.000	1136.000
18:00-19:00	902.000	172.000
19:00-20:00	953.000	176.000
20:00-21:00	0.000	280.000
21:00-22:00	1184.000	0.000
22:00-23:00	1188.000	0.000
23:00-00:00	1122.000	62.000

Last update: 21-May-08 17:10:02

Login
Dargestellt sind die freien Intraday-Kapazitäten für den grenzüberschreitenden Stromhandel. Alle Daten werden nach Können und Vermögen und ohne Gewähr für ihre Richtigkeit und Vollständigkeit ermittelt und zur Verfügung gestellt. Die Haftung für Schäden aufgrund der vorübergehenden Nichtbereitstellung oder Fehlerhaftigkeit von Werten ist ausgeschlossen, sofern kein vorsätzliches Verhalten vorliegt.
Berechtigte Teilnehmer erhalten auf Anfrage für den geschützten Bereich ein Passwort, mit dem sie sich anmelden können, um freie Intraday-Kapazitäten zu erwerben. Zur Teilnahme an der Intraday-Vergabe sind alle an der Tagesauktion zugelassenen Auktionsteilnehmer berechtigt.
Weitere Informationen sowie die Auktionsregeln und Ansprechpartner finden Sie unter:
Deutschland – Frankreich: www.rwetransportnetzstrom.com
Deutschland – Schweiz: http://www.enbw.com/content/de/netznutzer/strom/netzengpaesse/ch/index.jsp
DEUTSCHE BÖRSE SYSTEMS
© 2007 Deutsche Börse Systems
RWE Transportnetz Strom
e·on Netz
RWE
ENERGINET.DK
EnBW

The Portal Entry Page informs the visitor about the available Capacity on the different borders.

Via the Login Button the user is forwarded to the Login Dialog.

5 Traders GUI

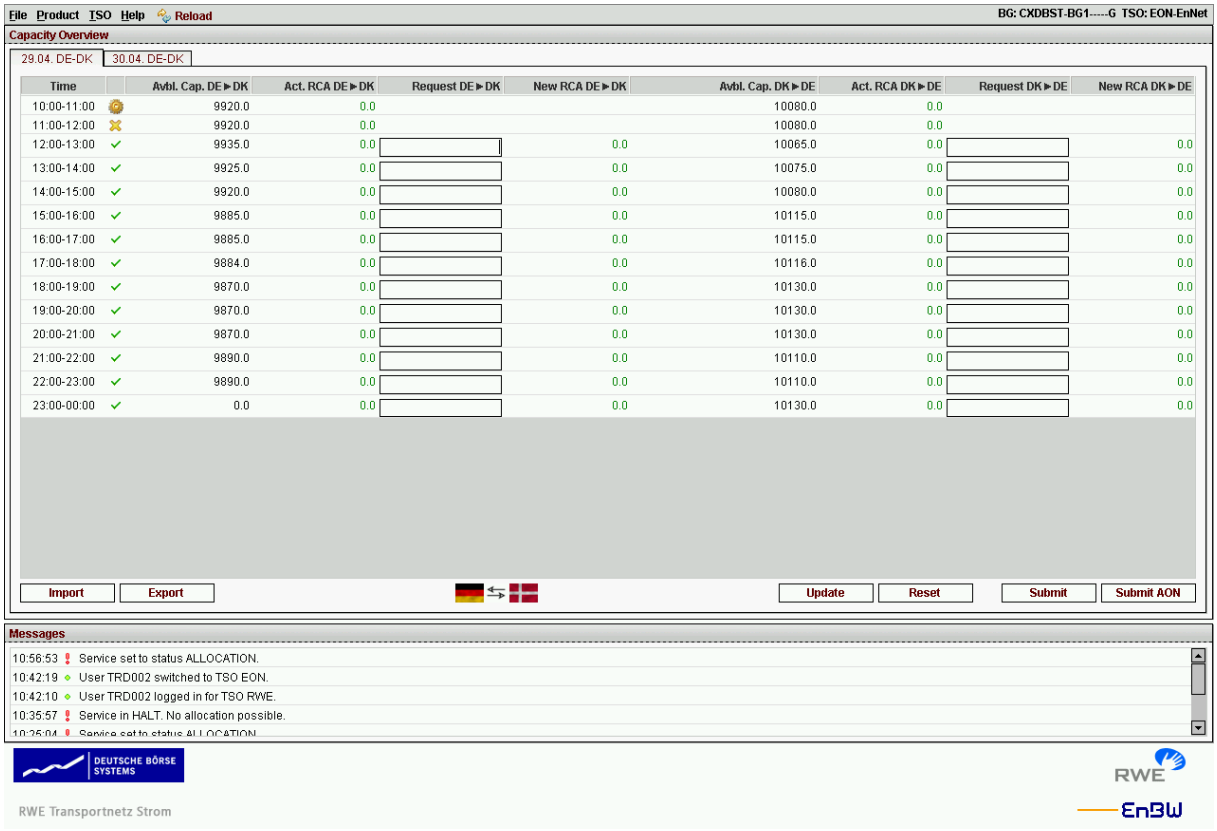
In this chapter, the Capacity Service's graphical user interface (GUI) for the trader is described.

After successful trader login, the Trader's GUI Capacity Service window opens automatically.

If Login Messages from the administrator are available, the user will receive a pop-up window (please refer to chapter 5.3.2).

The Capacity Service window can be closed by clicking on the symbol in the Internet browser.

The Capacity Service window is divided into three panels Menu Bar, Capacity Overview and Messages as depicted in the following example.



5.1 Menu Bar

The Capacity Service Menu bar has the items *File*, *Product*, *TSO*, *Help* and *Reload*. It also displays the selected Trader's *Balancing Group* and the selected *TSO*.

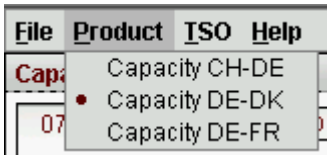
In case of Service HALT a message is displayed in red right of the item *Reload*.

5.1.1 File

The menu item *File* allows the trader to change the password.

5.1.2 Product

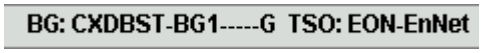
The menu item *Product* allows the trader to switch to another product (=border). The product list only displays products for which the Trader's Balancing Group is registered.



5.1.3 TSO

The menu item *TSO*, allows the Trader to switch to another *TSO* if the own balancing group is registered in more than one TSO area.

The selected TSO (=E.ON) is displayed in the right corner on the menu bar next to the Trader's Balancing Group. The corresponding interconnection TSO is also displayed on the right-hand side.



5.1.4 Help

The menu item *Help* provides the Trader with the information about the Capacity Service software version in production.

5.1.5 Reload

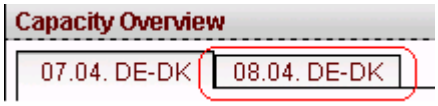
The Capacity Service window is updated and adapted to the size of the browser by clicking *Reload* on the menu bar.

5.1.6 Trader's Balancing Group

The currently assigned trader's Balancing Group is displayed to the left of the label "TSO" on the menu bar.

5.2 Capacity Overview

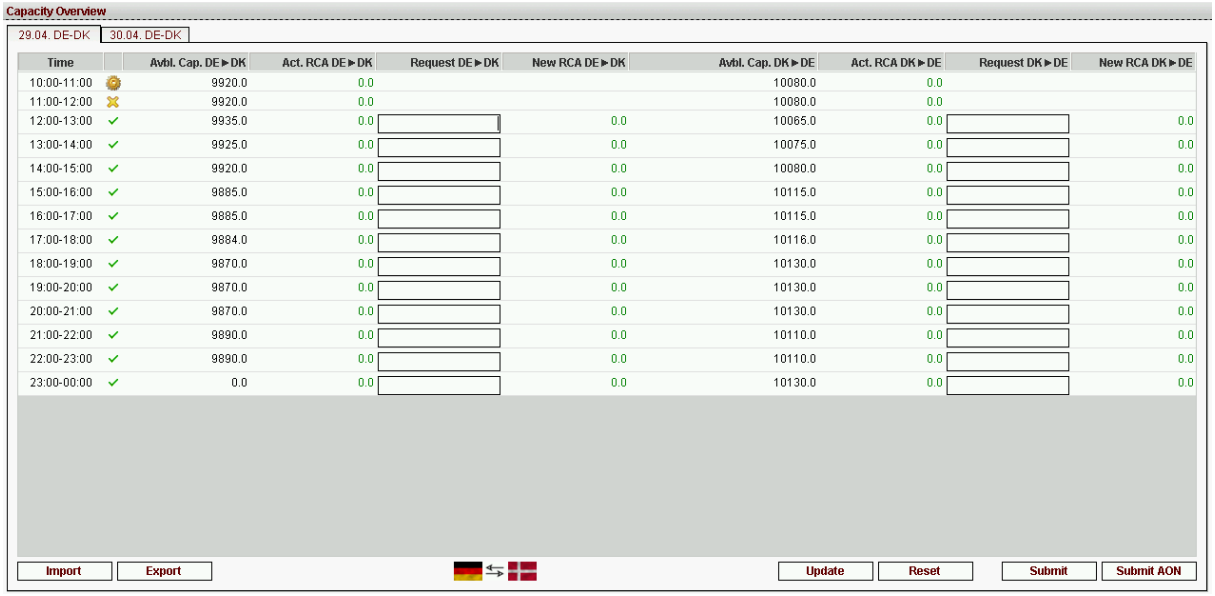
There are two tabs in the Capacity Overview window, one for the present day and one for the following day.



Each tab of the Capacity Overview window displays the following information.

- Time
- Status Symbols (status of contract)
- Available Capacity
- Actual RCA (for each direction)
- Request (for each direction)
- New RCA (for each direction).

The values are displayed in MW in the Capacity Overview.

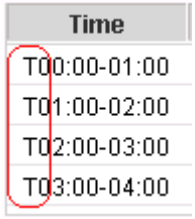


5.2.1 Capacity Overview - Columns

5.2.1.1 Time

The column **Time** displays all contracts, which have not been delivered yet and which are in delivery, for the time period. Capacity can only be requested by traders for contracts which are active and not in HALT. Capacity for a specific contract can be requested for a limited period of time, the so called contract allocation period. Inactive capacity allocation periods are locked (a respective symbol is shown and input is no longer possible in the requested columns).

If the next day is selected, the hours are marked with a “T” (for tomorrow) in front of the contracts name e.g. T04:00-05:00.



The day on which the time changes from summertime to wintertime has 25 hours. As a result, the hour 02:00-03:00 takes place twice and is denoted with an “A” for summertime and with a “B” for wintertime, e.g. 02:00-03:00A or 02:00-03:00B.

5.2.1.1.1 Status Symbols

The following symbols display the contract status:

Active contract.

Active but currently in HALT (Service HALT / Contract HALT)
or
Inactive contract after delivery period.

Inactive contract currently being delivered.

Inactive contract before delivering.

5.2.1.2 Available Capacity

The available interconnection capacity is displayed in the columns Avbl. Cap. The label also displays the selected product.

Avbl. Cap. DE ▶ DK
235.0
225.3
298.3
185.0
231.8
171.1
170.0

5.2.1.3 Actual RCA

In the columns Act. RCA, the capacity is shown which has already been allocated by the trader. The label displays the selected product.

Act. RCA DE ▶ DK
0.0
0.0
0.0
0.0
100.0

This value contains the capacity from the CAS (yearly, monthly and daily capacity) which has been uploaded by the TSO plus any capacity allocated via a request to the intraday capacity service.

5.2.1.4 Request

In the columns Request, capacity can be requested for each active contract and direction. The label displays the selected product.

The input fields in the Request columns can only be used to enter capacity requests for contracts, which are active. For contracts in HALT, the input fields are not visible.

In these fields it is only possible to enter numbers. One decimal place is allowed and the maximum quantity per request is 999.9 MW. Negative numbers are not allowed.

If the entered quantity is invalid, the affected field is highlighted in red and a validation error message appears in the *Messages* window, for example.

If capacity is requested for both directions for the same contract, then the RCA values are netted and only the difference is displayed.

There is no cancellation functionality. If the trader wants to cancel an allocation, then the equivalent amount should be entered in the other direction.

If the requested capacity is higher than that which is available, the Request field is highlighted in red (after the button *Update* or *Submit AON* has been pressed).

It is possible to enter more than one request at once. However, changes will only be accepted if all fields contain data with the correct format and with the correct value. If one field is erroneous, the entire request will be rejected.

For more details please refer to the chapter 6.

5.2.1.5 New RCA

The columns New RCA display the projected total allocated capacity in MW for the Trader's Balancing Group (sum of the columns Actual RCA and Request). The label is dependent on the selected product. If the amount requested is greater than the currently available capacity, then the amount displayed in the New RCA column is equivalent to the sum of Actual RCA plus the maximum available.

To re-inquire the New RCA columns the *Update* button has to be pressed.
The columns will also be updated automatically when a request has been successfully executed with the button *Submit* or *Submit AON*.

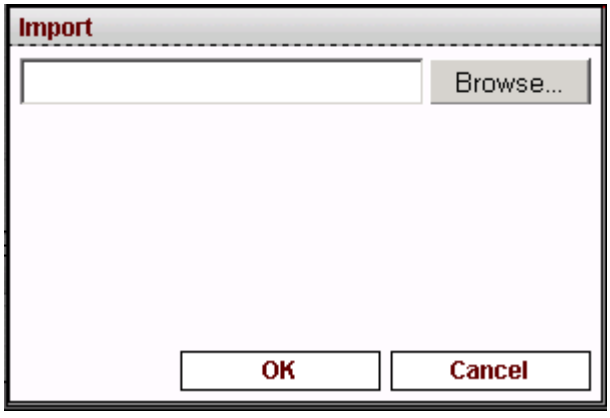
The New RCA field will be displayed in red if the requested capacity is greater than the capacity available (after button *Update* or *Submit AON* has been pressed).

5.2.2 Capacity Overview - Buttons

5.2.2.1 Import

With the Import button the trader can upload a file (in XML or CSV format) containing capacity requests (refer to 7.2.2 and 7.2.3) filling the request fields automatically.

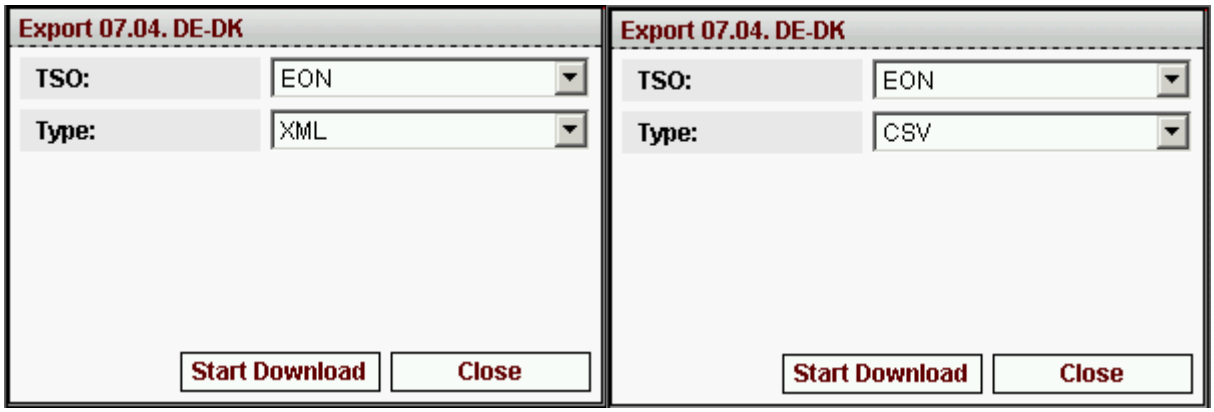
A popup appears asking the trader to search for that file. After the right path to the file is displayed, the trader can start or cancel the procedure by pressing "OK" or "Cancel".



5.2.2.2 Export

The allocated capacity in each direction (columns Actual RCA) for the Trader's Balancing Group, the selected TSO and product can be downloaded for the selected day (according tab) by the trader with the Export button (refer to 7.1.2 and 7.1.3).

After pressing the button, a popup appears. The trader is able to select the TSO and the format (XML or CSV) of the BG Allocation File. Via the “Start Download” Button the BG Allocation File can be downloaded, the “Close” Button will close the popup window.



Once Start Download has been initiated, a browser related dialogue window appears asking the trader to either open, save the file or to cancel the procedure.

After export, a message is displayed in the *Messages* window.

5.2.2.3 Update

With the Button Update the trader can re-inquire the current available capacity and refreshes the columns Avbl. Cap. and New RCA.

5.2.2.4 Reset

The Reset button clears all entries in the Request fields (fields are set to blank) and updates the columns Avbl. Cap. and New RCA.

5.2.2.5 Submit

Capacity is requested by clicking the Submit button. The amount to be requested is input into the Request fields (more than one request at once is possible). An internal process calculates and allocates the available capacity. Any requested capacity which cannot be allocated is discarded. The Request columns are reset (set to blank) after completion of the request process.

The columns Avbl. Cap., Act. RCA and New RCA will be updated after pressing Submit.

For more details please refer to the chapters 5.2.1.4 and 5.2.1.5.

5.2.2.6 Submit AON

The Submit AON button is used, if the trader wants to get all requested capacity in all requested capacity allocation periods or no capacity at all (All or Nothing). If the requested capacity for one contract is not available, then none of the capacity will be allocated. In this case, the corresponding Request fields will be highlighted in red.

Upon successful allocation, the Request columns are reset (set to blank).

For more details please refer to the chapters 5.2.1.4 and 5.2.1.5.

The columns Avbl. Cap. Act. RCA (only in case of successful allocation) and New RCA (only in case of successful allocation) are updated after pressing Submit AON.

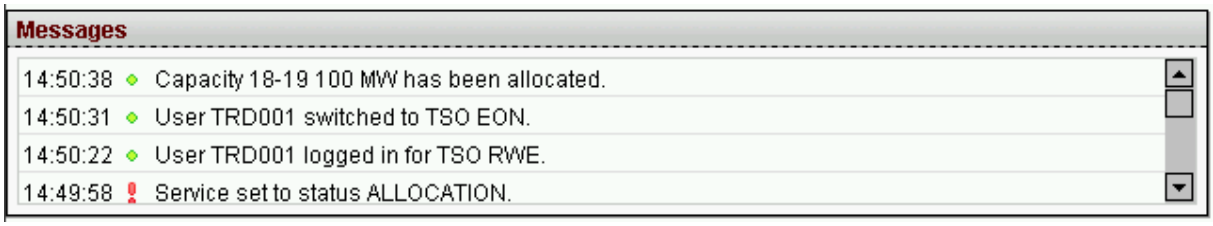
5.3 Messages

5.3.1 Messages Window

In the Messages window, the trader is informed about activities and changes on the Capacity Service. The messages can be triggered by the Service, the administrator, the trader or another user of the same balancing group.
Messages Types:

- Product related messages distributed to all administrators and Traders (Service/Contract HALT, etc.)
- Trader related messages (capacity allocation, export of BG Allocation files etc.)
- Validation error messages which disappear after update and are shown to the current user only.

Messages are displayed with a timestamp for the selected product. The *Messages* window is updated automatically.

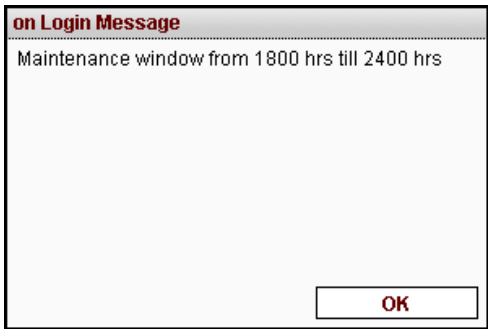

Messages
14:50:38 Capacity 18-19 100 MW has been allocated.
14:50:31 User TRD001 switched to TSO EON.
14:50:22 User TRD001 logged in for TSO RWE.
14:49:58 Service set to status ALLOCATION.

The following symbols display the message priority:
- High priority message.
- Medium priority message.
- Low priority message.
- Validation error message (only visible for the user).

5.3.2 On Login Message

An *on Login* message is triggered by the administrator for a specific product and is displayed as a high priority message in the Messages window when published.

This message is also displayed in a popup window when the trader logs on to the Capacity Service. The On Login Message is only visible for a limited time after the message has been published. Only the last *on Login* message is displayed in the popup.



Pressing the OK Button closes the on Login popup.

6 Use-Case - Entering a Capacity Request

A capacity request (Traders GUI) is entered as follows:

- Insert quantity into request field of an active contract.
- Press Update button (this provides the trader with a forecast or projection and is optional)
- Press Submit or Submit AON button which starts the internal processing and results in
    - Capacity Overview update
    - Messages.

Insert quantity into request field

The input fields in the columns Request DE>DK and Request DK>DE are used to enter capacity requests only for active contracts. It is possible to enter more than one request at once.

Press Update button (projection – optional)

After entering all requests, the trader can use the button *Update*

- To re-inquire the available capacity (columns Avbl. Cap. DE>DK and Avbl. Cap. DK>DE) and
- To update the columns New RCA DE>DK and New RCA DK>DE in order to get a projection of the total allocated capacity.

If the requested capacity is greater than the available capacity

- The columns Avbl. Cap. DE>DK and Avbl. Cap. DK>DE are updated.
- The corresponding fields in the columns Request DE>DK and Request DK>DE are highlighted in red.
- The corresponding values in the columns New RCA DE>DK and New RCA DK>DE are updated as a projection (sum of Act. RCA and max. Available capacity) and displayed in red.
- No message appears.

If the requested capacity is available

- The columns Avbl. Cap. DE>DK and Avbl. Cap. DK>DE are updated,
- The columns Request DE>DK and Request DK>DE remain as supplied,
- The columns New RCA DE>DK and New RCA DK>DE are updated as a projection (sum of Act. RCA and Request RCA columns),
- No message appears.

Press Submit button

When the button *Submit* has been pressed, the following columns are updated

- Avbl. Cap. DE>DK and Avbl. Cap. DK>DE.
- New RCA DE>DK and New RCA DK>DE (projection of the total allocated capacity).
- Act. RCA DE>DK and Act. RCA DK>DE.

If the requested capacity is higher than the currently available capacity

- The currently available capacity for each contract will be allocated.
- Requested capacity which cannot be allocated is discarded.
- The columns Avbl. Cap. DE>DK and Avbl. Cap. DK>DE are updated.
- The columns Act. RCA DE>DK and Act. RCA DK>DE are updated (sum of old value plus allocated capacity).
- The columns Request DE>DK and Request DK>DE will be reset and not populated (left blank).
- The columns New RCA DE>DK and New RCA DK>DE are updated as a projection (sum of Act. RCA and max. Available capacity).
- One or more message(s) related to the result of the allocation will be displayed in the *Messages* window.

If the requested capacity is available

- The requested capacity will be allocated,
- The columns Avbl. Cap. DE>DK and Avbl. Cap. DK>DE are updated.
- The columns Act. RCA DE>DK and Act. RCA DK>DE are updated (sum of old value plus allocated capacity).
- The columns Request DE>DK and Request DK>DE will be reset and not populated (left blank).
- The columns New RCA DE>DK and New RCA DK>DE are updated as a projection (sum of Act. RCA and Request RCA columns).
- A message related to the result of the allocation will be displayed in the *Messages* window.

Press Submit AON button

When the button *Submit AON* has been pressed the following columns are updated

- Avbl. Cap. DE>DK and Avbl. Cap. DK>DE.
- New RCA DE>DK and New RCA DK>DE.
- Act. RCA DE>DK and Act. RCA DK>DE.

If the requested capacity is higher than the capacity currently available

- No request will be executed.
- The request fields will not be reset, they will stay as requested.
- The columns Avbl. Cap. DE>DK and Avbl. Cap. DK>DE are updated.
- The corresponding fields in the columns Request DE>DK and Request DK>DE are highlighted in red.
- The corresponding values in the columns New RCA DE>DK and New RCA DK>DE are updated as a projection (sum of Act. RCA and max. Available capacity) and displayed in red.
- A validation error message appears in the *Messages* window.

If the requested capacity is available

- The requested capacity will be allocated,
- The columns Avbl. Cap. DE>DK and Avbl. Cap. DK>DE are updated,
- The columns Act. RCA DE>DK and Act. RCA DK>DE are updated (sum of old value plus allocated capacity),
- The columns Request DE>DK and Request DK>DE will be reset and not populated (left blank),
- The columns New RCA DE>DK and New RCA DK>DE are updated as a projection (sum of Act. RCA and Request RCA columns),
- A message related to the result of the allocation will be displayed in the *Messages* window.

7 File Specification

7.1 BG Allocation File Specification

7.1.1 General

The Balancing Group Allocation file can be exported online from the BG GUI by the trader as XML or CSV. They are offered to the Balancing Group user with the capacity allocations for the own Balancing Group and the currently assigned TSO.

The files are created

- Per Balancing Group,
- Per assigned TSO,
- Per calendar day.

The BG Allocation file contains

- the header for identification and
- the assigned capacities for the balancing group.

7.1.2 CSV

7.1.2.1 Header Area

7.1.2.1.1 Sender-, Receiver Identification

For the Sender- and Receiver Identification the EIC Party Codes are specified for the Capacity Service.

7.1.2.2 Time Series Area

The time series area is made up of 4 rows per hour (one for each 15 minute period).
The table is made up of 96 rows (four rows per hour). At the days of clock change from or to Daylight Saving Time the table consists of 92 respectively 100 rows.
Each row has three fields.

Field	Field description	Content/Format	Remark
Field 1	Contract long name, delivery period start date/time and end date/time	Char (31) YYYYMMDD_hh:mm(X)- YYYYMMDD_hh:mm(X)	(X)='A' or 'B' when time changes to winter time
Field 2	Allocated capacity in MW	integer	Netted capacity data from the trade file according to the products
Field 3	Allocated capacity in MW	integer	Netted capacity data from the trade file according to the products

7.1.3 XML

The Balancing Group (BG) Allocation file is based on the standardised ETSO Scheduling System (ESS) formats in XML.
The ESS file standard differentiates between the maximum (assigned) and the minimum (approved with schedule) capacity. Within intraday capacity allocation, there is no distinction between minimum and maximum capacity; values for the minimum series are set to those of the maximum series.

7.1.3.1 Product

The field Product in the Time series header is defined as 8716867000016.

7.1.3.2 Area and Party Codes

The BG Allocation files contain the elements InArea, OutArea and InParty, OutParty. These elements are specified as follows.

Element	Field description	Content
InArea	TSO area Code to which the capacity is directed	According to reference data (10Y…)
OutArea	TSO area Code from which the capacity is directed	According to reference data (10Y…)
InParty	BG party Code to which the capacity is directed	According to reference data (10X…)
OutParty	BG party Code from which the capacity is directed	According to reference data (10X…)

Note: InParty and OutParty have the same content.

7.1.3.3 Schedules, Capacity Allocation Periods (Contracts)

- Maximum, minimum:
  The ESS file standard differentiates between the maximum (assigned) and the minimum (approved with schedule) capacity. The Capacity Service however only recognizes one value for capacity; the maximum and the minimum capacity are equivalent.
- Sort:
  The time series are created for each Balancing Group with maximum and minimum values. The order of the time series values are: max, min for one direction, min, max for the other direction.
- Netting:
  The time series contain netted trade data. Therefore the values for one direction are zero.

Restrictions:
The file has to consist of 96 rows, except for the days of clock change (see 7.2.3.4).

7.2 BG Request File Specification

7.2.1 General

The BG Request file contains
- the header for identification and
- the assigned capacities for the balancing group.

7.2.1.1 File Name

File Name is not mandatory.

7.2.2 CSV

The CSV Capacity Request file consists of a header area and a time series area containing capacity requests. The file is structured in rows each with 3 fields which are separated with “,” or “;”.
Both areas have to be sent completely without any additional content between the rows.

7.2.2.1 CSV Header Area Structure

MessageVersion;<numeric>

OutArea;<EIC Area code>(according to time series field 2);<EIC Area code>(according to time series field 3)
InArea;<EIC Area code>(according to time series field 2);<EIC Area code>(according to time series field 3)
Party;<Balancing Group EIC party code>

7.2.2.2 CSV Header Area Validation

- The EIC Area codes (TSOs resp.) specified in OutArea and InArea have to match the TSOs the user is currently logged in for.
- The EIC party code specified in the *Party* line has to equal the Balancing Group the user belongs to.
- The EIC Area Code in field 2 of the OutArea has to equal the EIC Area Code in field3 of the InArea and vice versa. This restriction ensures that both time series apply to the same border.

The *MessageVersion* is not validated.

7.2.2.3 CSV Time Series Area

- The time series area is made up of 96 rows (4 rows per hour, one for each 15 minute period). At the days of clock change from or to Daylight Savings Time the table consists of 92 respectively 100 rows.
- The table has to be sent completely for all hours of the day.
- In case of hourly contracts, the capacity requests for all 4 quarters of a hour have to be equal.
- Each row has three fields.

Field	Field description	Content/Format	Remark
Field 1	Contract long name, delivery period start date/time and end date/time	Char (31) YYYYMMDD hh:mm(X)-YYYYMMDD hh:mm(X)	(X)='A' or 'B' when time changes to winter time
Field 2	Allocated capacity in MW for OutArea and InArea (field 2)	integer	Netted capacity data according to the specified direction of capacity transmission
Field 3	Allocated capacity in MW for OutArea and InArea (field 3)	integer	Netted capacity data according to the specified direction of capacity transmission

7.2.2.4 Example of a Capacity Request File CSV

MessageVersion;1
OutArea; 10YDE-EON------1; 10YDK-1--------W
InArea; 10YDK-1--------W; 10YDE-EON------1
Party; 11XDISAM-------V
20071022 00:00-20071022 00:15;12.000;0.000
20071022 00:15-20071022 00:30;12.000;0.000
20071022 00:30-20071022 00:45;12.000;0.000
20071022 00:45-20071022 01:00;12.000;0.000
20071022 01:00-20071022 01:15;0.000;0.000
20071022 01:15-20071022 01:30;0.000;0.000
(...)
20071018 23:00-20071018 23:15;20.000;0.000
20071018 23:15-20071018 23:30;20.000;0.000
20071018 23:30-20071018 23:45;20.000;0.000
20071018 23:45-20071019 00:00;20.000;0.000

7.2.3 XML

The ESS file standard differentiates between the maximum (assigned) and the minimum (approved with schedule) capacity. Within intraday capacity allocation there is no distinction between minimum and maximum capacity; values for the minimum series are set to those of the maximum series.

7.2.3.1 Product

The field Product in the Time series header is defined as 8716867000016.

7.2.3.2 Area and Party Codes

The Capacity Request file contains InArea, OutArea and InParty, OutParty in one Auction Time Series. These elements are specified as follows:

Element	Field description	Content
InArea	TSO area Code to which the capacity is directed	According to reference data (10Y…)
OutArea	TSO area Code from which the capacity is directed	According to reference data (10Y…)
InParty	BG party Code to which the capacity is directed	According to reference data (10X…)
OutParty	BG party Code from which the capacity is directed	According to reference data (10X…)

Note: InParty and OutParty have the same content.

7.2.3.3 Schedules, Capacity Allocation Periods (Contracts)

- Maximum, minimum:
  The ESS file standard differentiates between the maximum (assigned) and the minimum (approved with schedule) capacity. The Capacity Service however only recognizes one value for capacity; the maximum and the minimum capacity are equivalent.
- Sort:
  The time series are created for each Balancing Group with maximum and minimum values. The order of the time series values are: max, min for one direction, min, max for the other direction.
- Netting:
  The time series contain netted trade data. Therefore the values for one direction are zero.

Restrictions:
The file has to consist of 96 rows, except for the days of clock change (see 7.2.3.4), otherwise it will not be imported and a message is displayed in the BG GUI.

7.2.3.4 Clock Change

At the day of clock change to Daylight Saving, the field AuctionTimeInterval has the following start time and end time
YYYY-MM-DDT23:00Z/ YYYY-MM-DDT22:00Z

to indicate the one hour that is missing. The same is true for the field TimeInterval. The respective Time Series Area consists of 92 instead of 96 Intervals.

At the day of clock change from Daylight Saving, the field AuctionTimeInterval has the following start time and end time
YYYY-MM-DDT22:00Z/ YYYY-MM-DDT23:00Z

to indicate the one additional hour. The same is true for the field TimeInterval. The respective Time Series Area consists of 100 instead of 96 Intervals.

7.2.3.5 Example of a Capacity Request File XML

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
- <AuctionMessage xmlns="auctionmessage.xsd" DtdVersion="1" DtdRelease="0">
    <DocumentIdentification v="TESTIMPORT DK" />
    <DocumentType v="X04" />
    <DocumentVersion v="102" />
    <DocumentProcessType v="A01" />
    <DocumentClassificationType v="A01" />
    <DateOfDocumentCreation v="2008-05-13T13:34:29Z" />
    <SenderIdentification v="CXDBST-BG1-----G" codingScheme="A01" />
    <SenderRole v="A01" />
    <ReceiverIdentification v="10XDE-EON-NETZ-C" codingScheme="A01" />
    <ReceiverRole v="A07" />
    <AuctionTimeInterval v="2008-05-12T22:00Z/2008-05-13T22:00Z" />
  - <AuctionTimeSeries>
      <AuctionTimeSeriesIdentification v="Test_DK" />
      <AuctionTimeSeriesVersion v="XXX" />
      <BusinessType v="Y09" />
      <Product v="8716867000016" />
      <ObjectAggregation v="A01" />
      <InArea v="10YDE-EON------1" codingScheme="A01" />
      <OutArea v="10YDK-1--------W" codingScheme="A01" />
      <InParty v="CXDBST-BG1-----G" codingScheme="A01" />
      <OutParty v="CXDBST-BG1-----G" codingScheme="A01" />
      <MeasurementUnit v="MAW" />
    - <Period>
        <TimeInterval v="2008-05-12T22:00Z/2008-05-13T22:00Z" />
        <Resolution v="PT15M" />
      - <Interval>
          <Pos v="1" />
          <Qty v="0" />
        </Interval>
      - <Interval>
          <Pos v="2" />
          <Qty v="0" />
        </Interval>
      - <Interval>
          <Pos v="3" />
          <Qty v="0" />
        </Interval>
```